

# Notice of Allowability

Application No.

09/508,254

Examiner

Regina M. DeBerry

Applicant(s)

CHARETTE ET AL.

Art Unit

1647

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/11/04.
2. ☒ The allowed claim(s) is/are 1, 11, 15-23 (renumbered as 1-11 respectively).
3. ☒ The drawings filed on 05 May 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

*Elizabeth C. Kemmerer*

ELIZABETH KEMMERER  
PRIMARY EXAMINER

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior listings of claims:

1. (Currently Amended) A method for promoting survival of mammalian peripheral neural cells in vitro, wherein said cells express an OP/BMP-activated serine/threonine kinase receptor and a GDNF- or NGF-activated tyrosine kinase receptor, comprising:  
contacting said neural cells with an effective concentration of a preparation comprising
  - (a) an OP/BMP morphogen having an amino acid sequence having at least 70% homology or 60% identity with the C-terminal seven cysteine skeleton of human OP-1, wherein said OP/BMP morphogen can induce ectopic bone, and
  - (b) a GDNF neurotrophic factor or a NGF neurotrophic factor selected from GDNF, BDNF, NT-3, NT-4, NT-5 or NT-6,  
wherein said OP/BMP morphogen and said GDNF neurotrophic factor or NGF neurotrophic factor act synergistically to promote survival of mammalian neural cells.
- 2.-10. (Cancelled)
21. (Original) A method as in claim 1, wherein said neural cells comprise neurons or neurological cells.
- 12.-14. (Cancelled)
31. (Original) A method as in claim 1, wherein said OP/BMP morphogen comprises an amino acid sequence having at least 80% homology with the C-terminal seven-cysteine skeleton of human OP-1, and wherein said OP/BMP morphogen can induce ectopic bone.
41. (Original) A method as in claim 1, wherein said OP/BMP morphogen comprises an amino acid sequence having at least 90% homology with the C-terminal seven-cysteine skeleton of human OP-1, and wherein said OP/BMP morphogen can induce ectopic bone.
51. (Original) A method as in claim 1, wherein said OP/BMP morphogen comprises an amino acid sequence at least 70% identical to the C-terminal seven-cysteine skeleton of human OP-1.
61. (Previously Presented) A method as in claim 1, wherein said OP/BMP morphogen is selected from OP-1, OP-2, OP-3, BMP2, BMP3, BMP4, BMP5, BMP6 or BMP9.

- 7 ~~19~~. (Previously Presented) A method as in claim 1, wherein said effective concentration of the preparation is between 0.1 ng/ml and 10 µg/ml of said OP/BMP morphogen and between 0.1 ng/ml and 10 µg/ml of said GDNF neurotrophic factor or said NGF neurotrophic factor.
- 8 ~~20~~. (Original) A method as in claim ~~19~~ <sup>7</sup> wherein, said effective concentration is between 1 ng/ml and 100 ng/ml of said OP/BMP morphogen.
- 9 ~~21~~. (Previously Presented) A method as in claim ~~19~~ <sup>7</sup>, wherein said effective concentration is between 1 ng/ml and 100 ng/ml of said GDNF neurotrophic factor or said NGF neurotrophic factor.
- 10 ~~22~~. (Previously Presented) A method as in claim ~~19~~ <sup>7</sup>, wherein said effective concentration is between 1 ng/ml and 100 ng/ml of said OP/BMP morphogen and between 1 ng/ml and 100 ng/ml of said GDNF neurotrophic factor or said NGF neurotrophic factor.
- 11 ~~23~~. (Previously Presented) A method as in claim 1, wherein said GDNF neurotrophic factor comprises GDNF.

24.-32. (Cancelled)